

Amendments to the Drawings

Figures 3 and 4a-4e are amended to include the legend "Prior Art." New drawings as amended are enclosed. Copies of the original drawings showing the amendment in red also are enclosed.

REMARKS

In the Office Action dated June 13, 2005, claims 1-9 are pending, claims 1-5 are withdrawn, claims 6, 7 and 9 are rejected and objection is made to claim 8. Reconsideration is requested for at least the reasons discussed hereinbelow.

Amended drawings are submitted herewith designating Figures 3 and 4a-4e as "Prior Art", as requested by the Examiner.

Claim 6 is rejected under the judicially created doctrine of obviousness-type double patenting over claims 1 and 3 of US Patent No. 6,903,395 B2 because claim 6, if allowed, allegedly would extend the "right to exclude" already granted in the patent. Applicants strongly disagree.

Claims 1 and 3 of US Patent No. 6,903,395 B2 are directed to a semiconductor device having an interlayer lens wherein,

a convex intralayer lens of an **inorganic** material formed **to include the projection as a core** and a *transparent film with a flat top surface formed on the convex intralayer lens*, wherein the projection has a size of 0.1 to 1 × 0.1 to 1 μm in width and is 0.4 to 4 μm in height. [Emphasis added.]

Present claim 6 does not include a projection as a core. Nor does the present invention include a *transparent film with a flat top surface formed on the convex intralayer lens*.

Further, claim 6 of the present application requires that the interlayer material be made of a **photosensitive material** having a refractive index higher than that of the transparent film.

Instead, the interlayer lens of the '395 patent is formed by sputtering or CVd using conventional inorganic lens materials (col. 5, lines 34-40).

Additionally, the interlayer lens of the present invention has a convex portion facing the concave portion of the transparent film formed below the interlayer lens, whereas such structure is not present in claims 1 and 3 of the '395 patent.

Thus, it is not seen how present claim 6 is obvious to one of ordinary skill in the art from claims 1 and 3 of the '395 patent.

Claims 6, 7 and 9 are rejected under 35 U.S.C. §103(a) over the Background of Invention ("BOI") in view of Maruyama et al (US 6,504,188 B1). The BOI describes prior art interlayer lenses formed by a first layer of a silicon-nitride film material and a second layer formed of a SOG ("Spin on Glass") film on top of the first layer, wherein the two layers are etched to remove the SOG film and leave surface of the silicon-nitride film planarized (page 4, lines 2 *et seq.*).

Maruyama describes a solid state pickup device having an interlayer lens 37 made of a high refractive index material, plasma SiN (silicon nitride). To the extent it teaches the use of silicon-nitride, it is no different than Applicants' BOI. To Applicants' knowledge, silicon-nitride is not a photosensitive material. Furthermore, silicon-nitride is **not a resin**.

Contrary to the allegation of the Examiner, it is not seen where Maruyama or the BOI

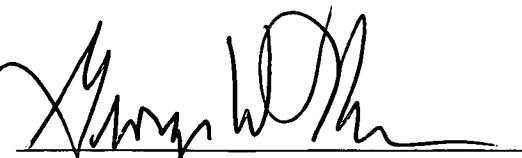
teach or suggest using a photosensitive material being used for the interlayer lens. Nor can it be seen where Maruyama or the BOI teach or suggest that the photosensitive material for the interlayer lens is a resin containing metal oxide. If the Examiner intends to maintain this rejection, Applicants request specific identification of the specific passages where the Examiner finds the alleged teaching can be found so that Applicants can provide further their considered response.

Thus, it is not seen how the presently claimed invention would have been obvious to one of ordinary skill in the art in view of any combination of the cited references.

In view of the amendments and discussion above, it is respectfully submitted that the present application is in condition for allowance. An early reconsideration and notice of allowance are earnestly solicited.

If for any reason a fee is required, a fee paid is inadequate or credit is owed for any excess fee paid, the Commissioner is hereby authorized and requested to charge Deposit Account No. **04-1105**.

Respectfully submitted,

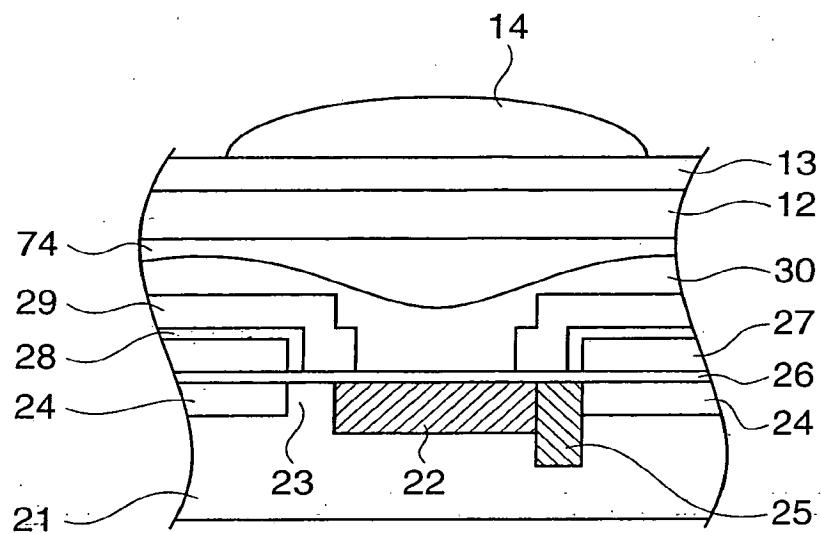
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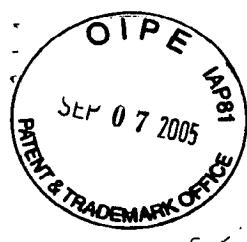
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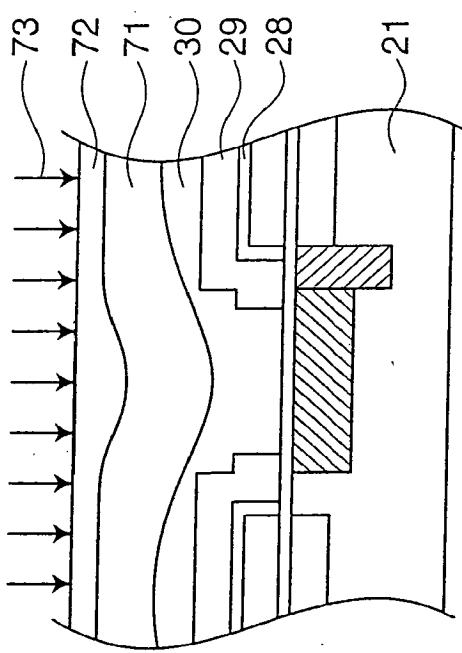
PRIOR ART

FIG.3

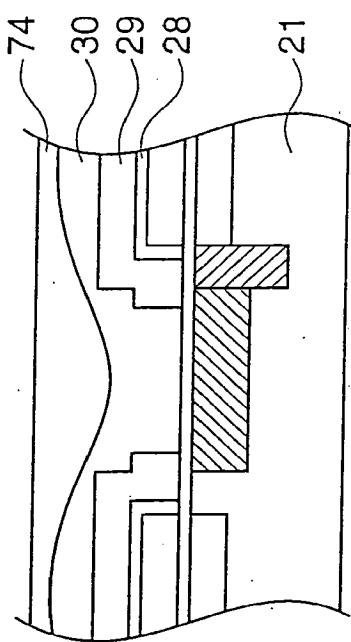




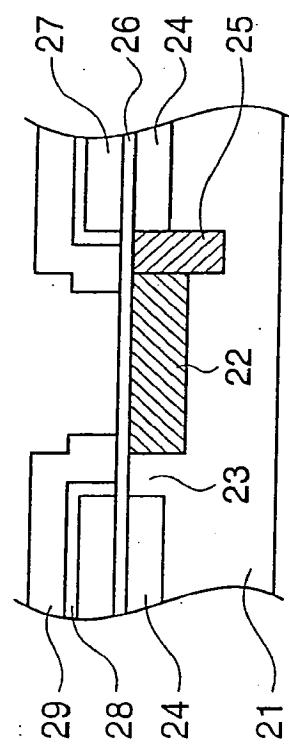
PRIOR ART
FIG.4(d)



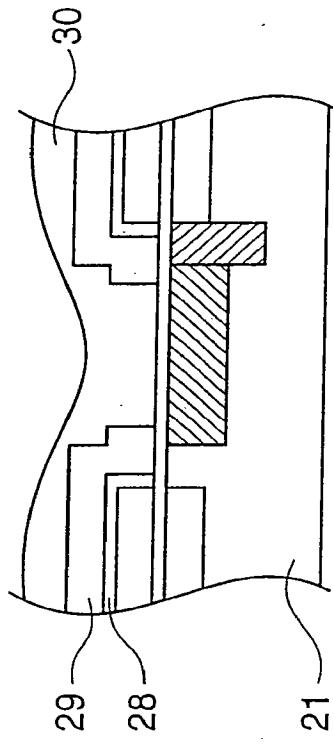
PRIOR ART
FIG.4(e)



PRIOR ART
FIG.4(a)



PRIOR ART
FIG.4(b)



PRIOR ART
FIG.4(c)

